

and the apical third sooty brown, the interval between these darker patches being of a paler tawny colour. Legs black, a ring at the apex of the femora and the tarsi bright fulvous.

This species, which is no doubt a local modification of *P. Jansoni*, is found at Pará.

[To be continued.]

XLIV.—On *Antiaris Bennettii*, a new Species of Upas-Tree from Polynesia. By BERTHOLD SEEMANN, PH.D., F.L.S.

*Antiaris Bennettii*; arbor mediocris; ramulis petiolisque pubescentibus, demum glabris; foliis brevipetiolatis ovato-oblongis acuminatis integerrimis, basi inæquali-cordatis, utrinque subglabris, supra lucidis; floribus masculis fasciculatis (2–4), pedunculis velutino pubescentibus, involuero lacinii ovato-acuminatis perigoniorum longitudinem reflexis, fœmineis solitariis; drupa ovato-acuta, dense velutina (v. v. sp.).

*Antiaris Bennettii*, Seem. in Bonplandia, vol. ix. (1861), p. 259, et ibid. vol. x. p. 3, t. 7 (1862).—Bennett's Gatherings of a Naturalist in Australasia (London, 1860), p. 403.

Nomen vernaculum Tucopiense 'Mami,' teste G. Bennett; Vitiense 'Mavu ni Toga,' teste Seemann.

Geogr. Distribution; Viti Levu, about Namara, and Moturiki (Seemann! n. 449, Harvey!).—Tucopia, lat. 12° S., long. 169° E. (G. Bennett! in Herb. Hook.), and Wallis Island, lat. 16° 30' S., long. 176° W. (Sir E. Home! in Mus. Brit.)

Hitherto only three species of *Antiaris* were known, viz., *A. toxicaria*, Lesch. (the genuine Upas-tree of Java), *A. innoxia*, Bl., and *A. macrophylla*, R. Br. A fourth species (ramis folisque utrinque velutinis) is cultivated in the Royal Botanic Gardens at Kew. A fifth species was found by Thwaites in Ceylon, and has been described by me as *A. Zeylanica* (Bonpl. x. p. 4, in adnot.); it is called by the Cingalese "Ritti-gass," and supplies, like *Q. saccidora*, Dalz. materials for sacks. In his 'Enumeration Pl. Zeyl.' p. 263, Thwaites classes it with *A. innoxia*, Bl., and *A. saccidora*, Dalz.; but I am by no means certain that even *A. innoxia* and *A. saccidora* are identical, and feel convinced that *A. Zeylanica*, Seem., is a very distinct species, at once distinguished from *A. saccidora*, Dalz., of which Wight gives a figure, by its scabrous leaves and pear-shaped fruits\*. A

\* *Antiaris Zeylanica*; arbor excelsa; ramulis, petiolis, pedunculis drupisque velutinis; foliis obovato-oblongis, acuminatis, integerrimis, supra scabris, subtus hirtellis; involucri masculi lacinii perigoniorum longitudinem reflexis; drupa obovato-obtusa (v. s. sp.).—*A. Zeylanica*, Seem. in Bonpl. vol. x. p. 4, in adnot. *A. innoxia*, Thwait. Enum. Pl. Zeyl. p. 263, non Bl., excl. syn. omu.—In Zeylania, ubi, teste cl. Thwaites,

sixth species of *Antiaris*, if not a seventh, is the one which, in honour of its original discoverer, I have named *A. Bennettii*. It is closely allied to *A. macrophylla*, R. Br., from the northern parts of New Holland, but at once distinguished in having fruits covered with a thick coating of velvety hair. It had been found in Fiji, first by Prof. Harvey, afterwards by me. About thirty years earlier, however, viz. in May 1830, the plant had been discovered by Dr. George Bennett, of Sydney, New South Wales, on a small island situated N.W. of Fiji, in lat. 12 S., long. 169 E., and was thus alluded to in his 'Gatherings of a Naturalist in Australasia' (8vo. London, 1860, p. 403):—

"When visiting the Island of Tucopia in May, I observed the *Antiaris*, or Upas-tree, planted in rows near the native huts; but I am not aware that it is indigenous. It is named 'Mami' by the natives; it is allied to the celebrated Upas-tree of Java, and accords with *A. macrophylla*, described and figured by the late Dr. Brown in the Appendix to 'Flinders's Voyage.' The tree at Tucopia is of slender growth, with pendulous branches; it was growing to the height of 8 to 12 feet. The leaves are oblong, large, pointed, distinctly veined, and of a light-green colour. The fruit is oval, rather larger than a pigeon's egg, rough externally, and of a beautiful crimson colour. Between the husk and kernel there is a quantity of white viscid juice. The kernel, of white colour and intensely bitter taste, is enclosed in a thin shell of a grey colour. It is planted by the natives either for dyeing or manufacturing the bark into native cloth. Specimens in fruit and flower are in the Botanical Collection of the British Museum." Thus far Dr. Bennett.

"A species of Upas" (*Antiaris Bennettii*, Seem.), I wrote in my Official Report on the Vitian or Fijian Islands, "commonly termed Mavu ni Toga (=Tonga), probably because it has been introduced from the Tongan Islands, was formerly planted about heathen temples, and is even now to be found in towns and villages. It is a middle-sized tree, with a thick crown of foliage, oblong glossy leaves, and a fleshy fruit of the size of an apricot, covered with a velvety skin of a most beautiful crimson colour. A gum exuding from the stem and branches is used for arrows. The exact nature of its poisonous qualities has not yet been ascertained. That they are not equal to those ascribed to the true Upas-tree of Java (*A. toxicaria*, Lesch.) is proved by the manner in which the natives handle it; but it is impossible to say whether one of the reasons for its cultivation near temples, and its probable introduction from Tonga, may not be

'Ritti-gass' vocatur.—The fruits of *A. saccidora*, Dalz., are elliptical in shape, as may be seen in the figure of it given by Wight, who distinctly states that his plate represents the Indian, not the Cingalese plant.

found in its yielding a poison, of which the heathen priests may have occasionally made use."

"Mavu ni Toga" literally means, the Mavu from the Tongan Islands; and it is not improbable that the tree may have been introduced from there. I have not met with any specimens from Tonga in our herbaria; but that would not prove that *Antiaris Bennettii* has originally not been derived from Tonga, as that group has been explored only very superficially, and Sir E. Home found it east of Fiji, viz. at Wallis Island, in long. 176° W. For the present, Viti must be regarded as the extreme southern limit of this species (and also of the genus *Antiaris*), and Tucopia as the northern. It is note-worthy that neither Bennett nor I found this species in a truly wild state; for in Viti it looks as if originally planted. The beauty of the foliage and the rich colour of the fruit fully entitle it to a place in our European conservatories; and we were so much struck with these qualities, that Mrs. Smythe made a coloured drawing of the plant on the spot, which, together with the dried specimens, served as the basis of the plate (tab. 7) published in the 'Bonplandia.'

#### BIBLIOGRAPHICAL NOTICE.

*Anahuac; or, Mexico and the Mexicans, Ancient and Modern.*

By EDWARD B. TYLOR. 8vo, 1861.

THIS interesting book is a narrative of excursions in Mexico, during the spring and summer of 1856, by the author and a friend, both of whom were well prepared by previous study and pursuits to observe carefully, and accurately note, the many points of interest afforded by the country, the people, and the antiquities of Mexico. Making their visit during a lull in the civil turmoil of that lamentably disturbed republic, they were fortunate in being able to avail themselves of that peaceable season in making excursions to remarkable places and ruins, and examining the national collection of antiquities and other objects of interest,—an opportunity that cannot have occurred since, owing to the recommencement of civil war in its worst form.

The evidences of an immense ancient population, shown by the abundance of remains of works of art, are especially treated of in the course of the narrative. The Mexican numerals, Mexican eclipses, Mexican art, and its connexion with that of Central America, are also well treated of. The ethnological relations of the Mexicans or Aztecs, their religion, civilization, and language, are largely treated of, as well as the present condition of their still numerous descendants.

With respect to subjects more closely related to natural history, we find numerous topics of interest brought forward by Mr. Tylor. From the beginning of the volume to the end, the author continually